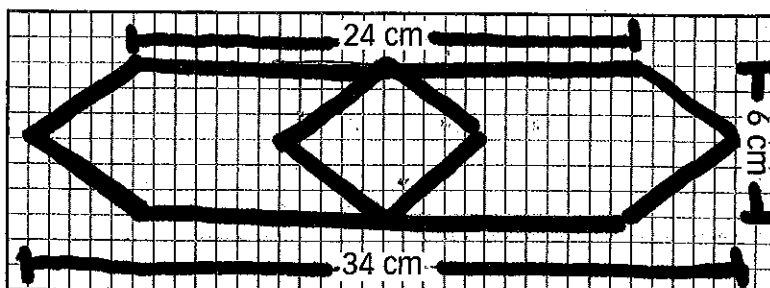




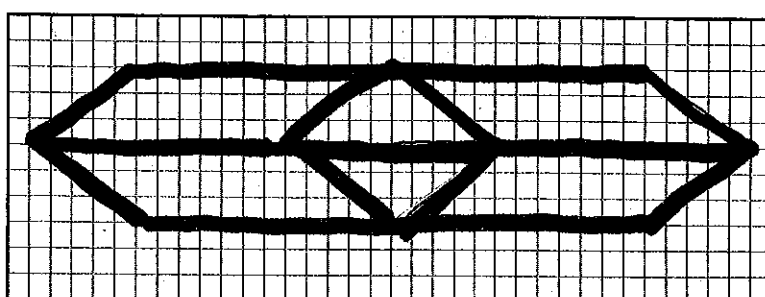
Read the problem below. Then explore how to find the area of a figure by breaking it up into triangles and parallelograms.

A part of another stained glass window design is shown below. How much glass would you need for this part of the window?



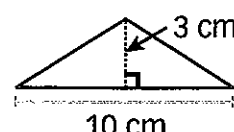
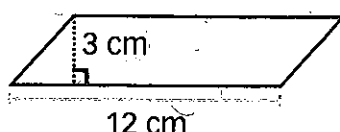
Plan: It

You can separate the figure into two triangles and four parallelograms.



Model: It

You can draw one of the parallelograms and one of the triangles and label them with their dimensions.



Solve: It

You can use formulas to find the areas of the triangles and the parallelograms to solve the problem.

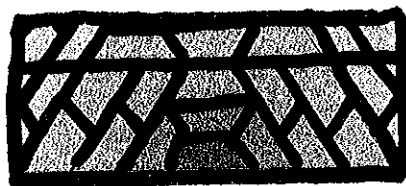
$$\text{Area of a triangle} = \frac{1}{2}bh$$

$$\text{Area of a parallelogram} = bh$$



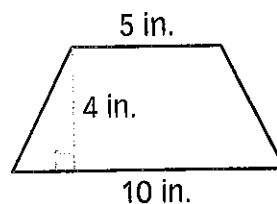
Read the problem below. Then explore one way to find the area of a trapezoid.

In art class, Swati created a trapezoid made up of smaller trapezoids that are all the same size and shape. If the height of the large trapezoid is 4 inches and the bases measure 5 inches and 10 inches, what is the area of the large trapezoid? What is the area of one of the small trapezoids?



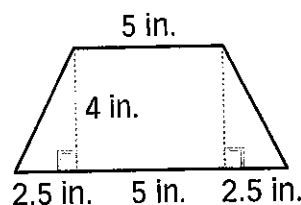
Picture It

You can draw the large trapezoid and label it with the information you know.



Model It

You can separate the trapezoid into two triangles and one rectangle and label their dimensions.



Solve It

You can find the areas of the triangles and the rectangle to help you solve the problem.

$$\text{Area of a triangle} = \frac{1}{2}bh$$

$$\text{Area of a rectangle} = bh$$

